

What is claimed is:

1. A method of providing multiple jobs for a device associated with a communication device, comprising:

providing a plurality of device records, wherein each of the device records

5 corresponds to a device associated with the communication device;

providing a plurality of job records for at least one of the device records, wherein each of the job records contains at least some information that is also provided in the corresponding one of the device records; and

linking the job records and the corresponding device record so that any one of the

10 job records may be accessed by first accessing the corresponding one of the device records.

2. A method, according to claim 1, further comprising:

providing one of a plurality of shared pointers in each of the job records and the corresponding one of the device records, wherein all of the shared pointers point to the
15 corresponding one of the device records.

3. A method, according to claim 1, wherein linking the job records includes providing a forward pointer and a backward pointer for each of the job records.

4. A method, according to claim 3, wherein linking the job records also includes providing a pointer to one of the job records in the corresponding one of the device
20 records.

5. A method, according to claim 1, wherein at least one of the device records includes a pointer to one of the job records corresponding to an active job.

6. A method, according to claim 1, wherein each of the job records includes information not found in other ones of the job records.

5 7. A method of facilitating remotely accessing device information, comprising:

creating a plurality of jobs for the device, wherein each of the jobs relates to at least portion of tasks associated with remotely accessing device information;

associating the jobs with a device record for the device; and

determining a link id for each of the jobs, wherein the link id uniquely identifies

10 I/O operations for the job.

8. A method, according to claim 7, wherein creating a plurality of jobs includes:

finding a free element on a job record array;

obtaining a shared pointer that points to the device record for the device;

copying constants from the device record to each of the job records;

15 setting shared variables for each of the job records;

initializing job specific data for each of the job records;

setting pointers for each of the job records; and

incrementing a job counter by one for each of the job records.

9. A method, according to claim 8, wherein finding a free element on a job record array includes:

determining if a free element exists; and
if a free element does not exist, posting an error.

5 10. A device record that facilitates remotely accessing device information, comprising:

an active job pointer field;
a job count field;
a constants field;
a shared pointer; and
a shared parameters field.

10 11. A device record, according to claim 10, wherein said active job pointer field points to an active job record corresponding to the device record.

12. A device record, according to claim 10, wherein said job count field indicates how many job records correspond to the device record.

15 13. A device record, according to claim 10, wherein said shared pointer points to the device record.

14. A job record that facilitates remotely accessing device information for a device, comprising:

an id track table field;

a constants field;

5 a shared pointer field;

a job specific data field;

a forward pointer; and

a backward pointer;

15. A job record, according to claim 14, wherein said forward pointer and said backward pointer point to other job records that correspond to the device.

10 16. A job record, according to claim 14, wherein the shared pointer points to a device record corresponding to the device.

17. Computer software that provides multiple jobs for a device associated with a communication device, comprising:

executable code that provides a plurality of device records, wherein each of the device records corresponds to a device associated with the communication device;

5 executable code that provides a plurality of job records for at least one of the device records, wherein each of the job records contains at least some information that is also provided in the corresponding one of the device records; and

executable code that links the job records and the corresponding device record so that any one of the job records may be accessed by first accessing the corresponding one 10 of the device records.

18. Computer software, according to claim 17, further comprising:

executable code that provides one of a plurality of shared pointers in each of the job records and the corresponding one of the device records, wherein all of the shared pointers point to the corresponding one of the device records.

15 19. Computer software, according to claim 17, wherein the executable code that links the job records includes executable code that provides a forward pointer and a backward pointer for each of the job records.

20. Computer software, according to claim 19, wherein the executable code that links the job records also includes executable code that provides a pointer to one of the job records 20 in the corresponding one of the device records.

21. Computer software, according to claim 17, wherein at least one of the device records includes a pointer to one of the job records corresponding to an active job.

22. Computer software, according to claim 17, wherein each of the job records includes information not found in other ones of the job records.

5 23. Computer software that facilitates remotely accessing device information, comprising:

executable code that creates a plurality of jobs for the device, wherein each of the jobs relates to at least portion of tasks associated with remotely accessing device information;

10 executable code that associates the jobs with a device record for the device; and executable code that determines a link id for each of the jobs, wherein the link id uniquely identifies I/O operations for the job.

24. Computer software, according to claim 23, wherein executable code that creates a plurality of jobs includes:

executable code that finds a free element on a job record array;

executable code that obtains a shared pointer that points to the device record for

5 the device;

executable code that copies constants from the device record to each of the job records;

executable code that sets shared variables for each of the job records;

executable code that initializes job specific data for each of the job records;

executable code that sets pointers for each of the job records; and

executable code that increments a job counter by one for each of the job records.

10 25. Computer software, according to claim 24, wherein executable code that finds a free element on a job record array includes:

executable code that determines if a free element exists; and

15 executable code that posts an error if a free element does not exist.